Lab4

Code: **Create the interactive webpages using Javasrcript.**

```html
<!DOCTYPE html>
<html>
<head>
  <title>Lab 3</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      padding: 20px;
    }
    button {
      margin: 5px;
      padding: 8px 12px;
      border: none;
      border-radius: 6px;
      background: #0077ff;
      color: white;
      cursor: pointer;
    }
    button:hover {
      background: #005fcc;
    }
    .output {
      margin-top: 15px;
      padding: 10px;
      border: 1px solid #ccc;
      border-radius: 6px;
      background: #f9f9f9;
      min-height: 30px;
    }
    .demoClass {
      padding: 5px;
      margin: 5px;
      border-radius: 4px;
      background: #eee;
    }
  </style>
</head>
<body>
  <h2>Experiment No 3: Interactive Webpage with JavaScript</h2>


  <button id="btnVar">Show Variables</button>
  <button id="btnLoop">Run Loop</button>
```

```html
<div id="output" class="output">Output will appear here...</div>


<script>

  const output = document.getElementById("output");
  const btnVar = document.getElementById("btnVar");
  const btnLoop = document.getElementById("btnLoop");



  btnVar.addEventListener("click", () => {
    var x = 10;
    let y = 20;
    const PI = 3.14;
    output.innerHTML = `var x = ${x}, let y = ${y}, const PI = ${PI}`;
  });


  btnLoop.addEventListener("click", () => {
    let text = "Loop Output:<br>";
    for (let i = 1; i <= 5; i++) {
      text += "For loop i = " + i + "<br>";
    }
    let j = 0;
    while (j < 3) {
      text += "While loop j = " + j + "<br>";
      j++;
    }
    let k = 0;
    do {
      text += "Do-while loop k = " + k + "<br>";
      k++;
    } while (k < 2);


    const arr = ["A", "B", "C"];
    for (const val of arr) {
      text += "For-of value = " + val + "<br>";
    }


    const obj = {a:1, b:2, c:3};
    for (const key in obj) {
      text += `For-in key = ${key}, value = ${obj[key]}<br>`;
    }

    output.innerHTML = text;
  });
```

```
    </script>
</body>
</html>
```

Output:

Experiment No 3: Interactive Webpage with JavaScript

[Show Variables]   [Run Loop]

var x = 10, let y = 20, const PI = 3.14

```
Loop Output:
For loop i = 1
For loop i = 2
For loop i = 3
For loop i = 4
For loop i = 5
While loop j = 0
While loop j = 1
While loop j = 2
Do-while loop k = 0
Do-while loop k = 1
For-of value = A
For-of value = B
For-of value = C
For-in key = a, value = 1
For-in key = b, value = 2
For-in key = c, value = 3
```